

Amendments to the Claims

Please **amend** claims 78, 81, 83, 85-87, and 89.

1-77. (Cancelled)

78. (Currently Amended) A method of introgressing an allele conferring soybean cyst nematode resistance into a non-resistant soybean plant comprising

(A) crossing at least one **SCN resistant** soybean plant bearing an rhg1 SCN resistant allele with at least one **SCN sensitive** soybean plant bearing an rhg1 SCN sensitive allele in order to form a segregating population, wherein said at least one **SCN resistant** soybean plant bearing said rhg1 SCN resistant allele is ~~derived from one or more soybean lines~~ selected from the group consisting of PI200499, A2869, ~~PI404198B~~ **PI404198 B**, PI404166, PI548988, PI507354, ~~PI438489B~~ **PI438489 B**, PI84751, PI407922, PI540556 and A2069 **AG4301**, **and SCN resistant progeny thereof**,

(B) screening said segregating population with one or more nucleic acid markers to identify an rhg1 SCN resistant allele, and

(C) selecting one or more members of said segregating population having said rhg1 SCN resistant allele.

79. (Previously Presented) The method according to claim 78, wherein said one or more members of said segregating population bear yellow soybeans.

80. (Previously Presented) The method according to claim 78, wherein said one or more nucleic acid markers are capable of detecting single nucleotide polymorphisms or INDEL mutations.

81. (Currently Amended) The method according to claim 78, wherein said one or more nucleic acid markers are capable of detecting one or more polymorphisms **located at a position in SEQ ID NO: 2** selected from the group consisting of 45173, 45309, 45400, 45416, 45439, 45611, 45916, 45958, 46049, 46113, 47057, 47057, 47140, 47208, 47571, 47617, 47796, 47856, 47937, 48012, 48060, 48073, 48135, 48279, 48413, 48681, 49012, 49316, 46227, 46703, and 48881.

82. (Previously Presented) The method according to claim 80, wherein said one or more nucleic acid markers are capable of detecting single nucleotide polymorphisms.

83. (Currently Amended) The method according to claim 82, wherein said single nucleotide polymorphisms are **located at a position in SEQ ID NO: 2** selected from the group consisting of 45173, 45309, 45400, 45416, 45439, 45611, 45916, 45958, 46049, 46113, 47057, 47057, 47140, 47208, 47571, 47617, 47796, 47856, 47937, 48012, 48060, 48073, 48135, 48279, 48413, 48681, 49012, and 49316.

84. (Previously Presented) The method according to claim 80, wherein said one or more nucleic acid markers are capable of detecting INDEL mutations.

85. (Currently Amended) The method according to claim 84, wherein said INDEL mutations are **located at a position in SEQ ID NO: 2** selected from the group consisting of 46227, 46703, and 48881.

86. (Currently Amended) A method of introgressing an allele conferring soybean cyst nematode resistance into a non-resistant soybean plant comprising using **screening** one or more nucleic acid markers ~~for marker-assisted selection to select one or more~~ **and selecting a** soybean ~~lines~~ **plant**, wherein said allele is an rhg1 allele, and wherein said one or more nucleic acid markers are capable of detecting one or more single nucleotide polymorphisms, **and wherein said selected soybean plant is SCN resistant,**
thereby introgressing said allele into said non-resistant soybean plant.

87. (Currently Amended) The method according to claim 86, wherein said single nucleotide polymorphisms in said rhg1 gene are **located at a position in SEQ ID NO: 2** selected from the group consisting of 45173, 45309, 45400, 45416, 45439, 45611, 45916, 45958, 46049, 46113, 47057, 47057, 47140, 47208, 47571, 47617, 47796, 47856, 47937, 48012, 48060, 48073, 48135, 48279, 48413, 48681, 49012, and 49316.

88. (Previously Presented) The method according to claim 86, wherein said introgressing said allele into said non-resistant soybean plant results in one or more resistant progeny bearing yellow soybeans.

89. (Currently Amended) A method of introgressing an allele conferring soybean cyst nematode resistance into a non-resistant soybean plant comprising using **screening** one or more nucleic acid markers ~~for marker-assisted selection to select one or more~~ **and selecting a** soybean ~~lines~~ **plant**, wherein said one or more nucleic acid markers are capable of detecting one or more polymorphisms **located at a position in SEQ ID NO: 2** selected from the group consisting of 45173, 45309, 45400, 45416, 45439, 45611, 45916, 45958, 46049, 46113, 46227, 46703, 47057, 47057, 47140, 47208, 47571, 47617, 47796, 47856, 47937, 48012, 48060, 48073, 48135, 48279, 48413, 48681, 49012, 48881, and 49316, **and wherein said selected soybean plant is SCN resistant,**

thereby introgressing said allele into said non-resistant soybean plant.

90. (Previously Presented) The method according to claim 89, wherein said introgressing said allele into said non-resistant soybean plant results in one or more resistant progeny bearing yellow soybeans.